



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Mr. Ted Diers, Administrator,
Watershed Management Bureau
New Hampshire Department of Environmental Services
P.O.Box 95
29 Hazen Drive
Concord, New Hampshire 03302

June 20, 2011

Re. Proposed Lamprey Designated River Watershed Management Plan

Dear Mr. Diers:

Thank you for the opportunity to comment on the Proposed Lamprey Designated River Water Management Plan (WMP). EPA is providing these comments in its role as a member of the Instream Flow Technical Review Committee (TRC) for the Lamprey River. It is our understanding that Lamprey River River Instream Flow Report's (DES, 2009) Protected Instream Flows (PISFs) will be maintained through implementation of the Proposed Lamprey River WMP. Although we have not actively participated the development of the WMP, to the extent that it relies on the findings of the PISF, we are providing comments. Our comments focus on two topics: elimination of the 4 cubic feet per second (cfs) cut off flow and the proposed relief flows.

Cut off flow of 4 cfs

The Draft PISF included a recommendation that a 4 cfs minimum be maintained at the USGS gauge at Packers Falls.

"The lowest naturalized flow recorded in last 30 years was 3.7 cfs at the Packers Falls gage. Hence, allowing flows to fall under this level creates unpredictable, catastrophic conditions that are not protective to the aquatic community. Therefore we recommend that the flows should never be allowed to fall below 4 cfs.

That recommendation was not included in the Final PISF or in the Proposed Lamprey River WMP. In a response to a comment on this by the National Park Service on the Draft PISF, DES stated,

"It should also be noted that the recommendation that "flows never be allowed to fall below 4 cfs" has been withdrawn from the report. It is believed that the remaining flow protections, when implemented under the Water Management Plans, will prevent abnormally low flow

conditions. If flows were to reach these levels because of natural conditions, it is likely that emergency status would be declared by the Commissioner under RSA 483:9-c.IV.

While we recognize if natural flows that drop to this level it may constitute an emergency situation, it seems that having no floor in the PISF is not protective of aquatic life. We believe that you can have both, a floor to withdrawals and a provision for emergency use (Chapter 483:9-c s)

Proposed Relief Flows

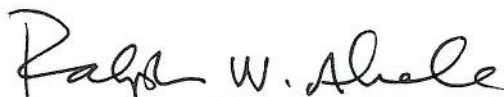
The WMP contains provisions for relief flows. (Table 7 and Appendix F) According to the WMP, aquatic experts on the project team suggested that

... the stress on the aquatic ecosystems due to flows being below the protected instream flow could be reset by the occurrence of least one day where the river flow exceeded the protected instream flow magnitude.

To the best of our knowledge the concept of relief flows was not examined by the Technical Review Committee nor is included in either the Draft or Final Lamprey River Instream Flow Report. The relief flow volume, according to the Proposed WMP, was computed as the amount of water deficit for the two day period immediately after each persistent and each catastrophic duration was reached in the historic record. Not surprisingly, an examination of Table 7 shows that it is roughly the same percentage of the volume needed to meet historical deficits for each bioperiod. While two days of relief flows would give some aquatic species some relief from lows flows, the biological rationale for a two day relief period for each bioperiod should be re-examined by either the Technical Review Committee or other appropriate scientists. The relief flows would require releases from two upstream impoundments. We understand that the WMP looks at balancing water uses with PISF recommendations; however, a better scientific rationale for the length of the pulse releases would make that process more transparent.

Thank you for the opportunity to provide comments. Please contact me at (617) 918-1629 if you have any questions about our letter.

Sincerely,



Ralph W. Abele
Instream Flow Coordinator
EPA Region 1